Pandemic Preparedness: Child Care Community

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Outline

- Difference between avian, pandemic and seasonal influenza
- Pandemic Influenza update and current status
- Transmission of infectious diseases in Day Care and School settings and strategies to limit spread
- The impact of individual pandemic influenza preparedness on the Community strategy

Seasonal Influenza – "flu"

- Respiratory infection spread through contact with respiratory secretions from infected person who is coughing and/or sneezing
- Takes 1 – 5 days from exposure to onset of symptoms
  - Fever, chills, body aches, sore throat, cough, headache
- People have some immunity against circulating viruses from previous exposure or vaccination
- In the U.S., peak flu activity usually occurs between December and March

Avian Influenza – “bird flu”

- Infection caused by avian influenza A viruses that occur naturally among birds
- Infected birds shed virus in saliva, nasal secretions and feces. Human cases result from contact with infected poultry
- Two main forms among poultry:
  - Low pathogenic
  - Highly pathogenic (H5N1)

H5N1 bird flu virus

- Highly contagious and lethal among poultry
- Caused outbreaks in poultry primarily in Asia
- As of August 17, 239 confirmed human cases, including 140 deaths
  - Majority of cases have resulted from direct contact with sick poultry
  - Rare cases of human-to-human spread
- Meets two out of the three conditions required to cause a pandemic

Pandemic Influenza

- Global disease outbreak
  1. **Emergence of a <u>new</u> influenza A virus into the human population**
  2. **Causes serious illness because individuals have no existing immunity (protection)**
  3. Adapts into a strain capable of spreading easily from person to person worldwide
- Currently there is no influenza pandemic anywhere in the world

Key Differences Between Annual Flu And Pandemic Flu

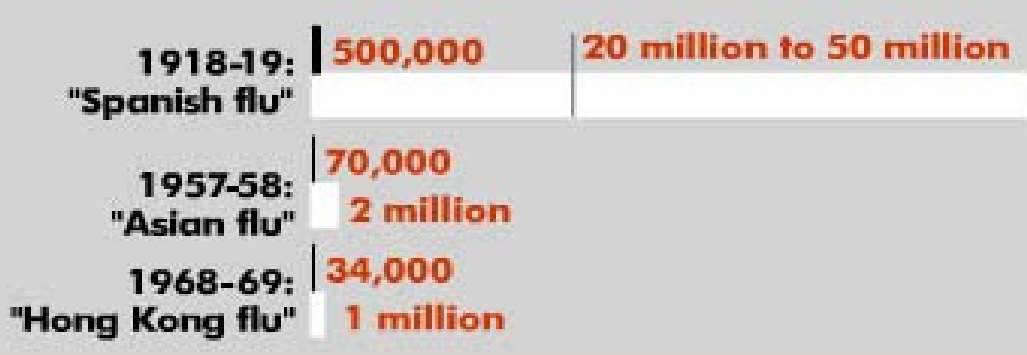
ANNUAL FLU	PANDEMIC FLU
Occurs every year during the winter months.	Occurs three to four times a century and can take place in any season.
Affects 5-20 percent of the U.S. population.	Experts predict an infection rate of 25-50 percent of the population, depending on the severity of the virus strain.
Globally, kills 500,000-1 million people each year, 36,000-40,000 in the U.S.	The worst pandemic of the last century -- the "Spanish Flu" of 1918 -- killed 500,000 in the U.S. and 50 million worldwide.
Most people recover within a week or two.	Usually associated with a higher severity of illness and, consequently, a higher risk of death.
Deaths generally confined to "at risk" groups, such as the elderly (over 65 years of age); the young (children aged 6-23 months); those with existing medical conditions like lung diseases, diabetes, cancer, kidney, or heart problems; and people with compromised immune systems.	All age groups may be at risk for infection, not just "at risk" groups. Otherwise fit adults could be at relatively greater risk, based on patterns of previous epidemics. For example, adults under age 35 (a key segment of the U.S. workforce) were disproportionately affected during the 1918 pandemic.

Key Differences Between Annual Flu And Pandemic Flu

ANNUAL FLU	PANDEMIC FLU
Vaccination is effective because the virus strain in circulation each winter can be fairly reliably predicted.	A vaccine against pandemic flu may not be available at the start of a pandemic. New strains of viruses must be accurately identified, and producing an effective vaccine could take six months.
Annual vaccination, when the correct virus strain is used, is fairly reliable and antiviral drugs are available for those most at risk of becoming seriously ill.	Antiviral drugs may be in limited supply, and their effectiveness will only be known definitively once the pandemic is underway.

SOURCE: Trust for America's Health

Deadly pandemics of the 20th century



Influenza victims crowd into an emergency hospital in Kansas at Camp Funston, during the "Spanish Flu" pandemic in 1918. AP

The Next Pandemic?

- No one can predict timing, nature and severity or what the new virus may be
- Experts worldwide believe near term pandemic may be imminent
- Concern over widespread circulation of H5N1 viruses among avian populations and the potential for increased transmission to humans and other mammalian species

What to expect during a pandemic

- 2 or 3 waves of disease outbreak over period of a year or more; outbreak in a community lasting about 2 – 3 months
- Possibly as many as 35% of the population affected, with large numbers of deaths
- Enormous demands on health care system
- Delays and shortages in available vaccine and antiviral drugs

What to expect during a pandemic – cont'd

- Limited regional, state and federal aid due simultaneous outbreaks throughout the country
- Possible disruptions in usual services
  - travel restrictions, closings of schools and businesses, cancellations of large public gatherings

Infectious Diseases Transmission in School and Day Care settings

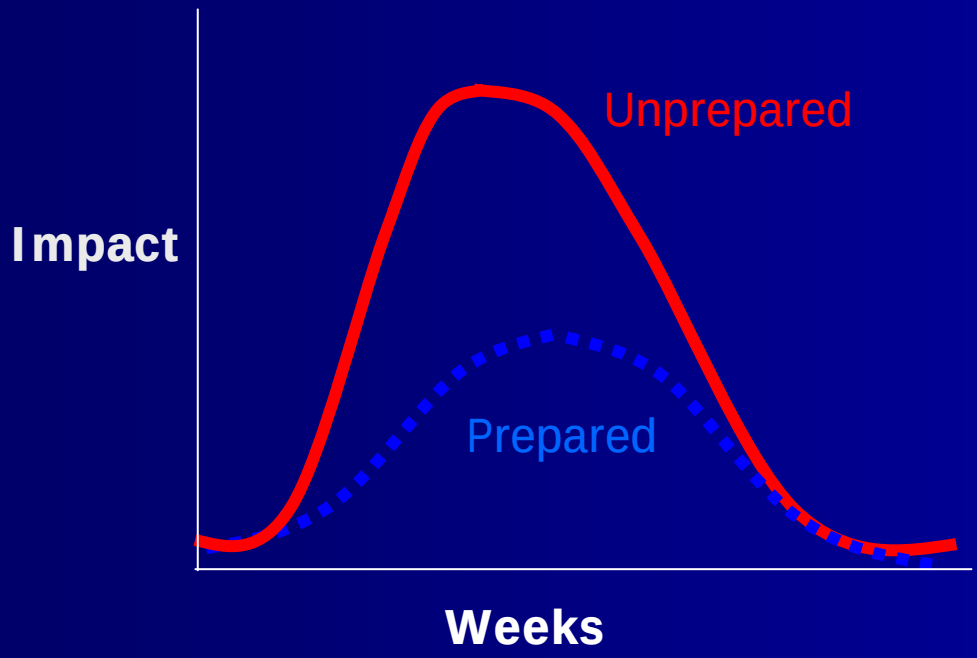
- GI illnesses, pink eye, colds, flu and other infectious diseases can spread quickly
- High attack rates among children
  - Typically shed germs in respiratory secretions and feces longer
  - Tend to have poor hand and respiratory hygiene
- Impact
  - Potential for serious illness, especially in the very young and medically fragile
  - Disruption of school activities
  - Parental absenteeism from work
  - Secondary illness episodes among family members

Fairfax County's Hand Washing Campaign: "Your Health is in Your Hands: WASH"

Are you prepared?

- Do you have a home disaster preparedness plan?
- Get your flu shot each year?
- Are you staying informed?
- Encouraging your staff and parents to be prepared?
- Does your day care have a strategy for stopping germs from spreading?
  - Cover coughs and sneezes
  - Frequent and proper hand washing
  - Stay home when sick

Impact of Planning



Adapted from HHS

Community preparedness begins with *you*